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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,109	04/02/2001	Shunsuke Takaki	54389USA8A.0	8358

7590 09/21/2004

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EXAMINER	
WILLIAMS, JOSEPH L	
ART UNIT	**PAPER NUMBER**
2879	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/762,109	TAKAKI ET AL.	
	Examiner	Art Unit	
	Joseph L. Williams	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-21 and 23-34* is/are rejected.

7)☒ Claim(s) *22 and 35* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-21 and 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. (US 5,438,988) in view of Therriault et al. (US 4,904,247).

Regarding claim 18, Duan ('988) teaches in figure 2 and in column 10, line 58 through column 11, line 28, an electrode (10) adapted for attachment to an adherend comprising: (a) an electrode support (16) having a first and a second opposed surface, (b) a conductor (26) supported by the electrode support and (c) a conductive adhesive layer (14) that is disposed upon a major portion of the first, opposed surface of the electrode support and the conductor, wherein at least a portion of the conductive adhesive layer is hot-pressed to enhance the adhesion strength of the portion to an adherend (see column 12, lines 39-43).

Duan ('988) does not disclose a conductive adhesive layer comprising a hydrophilic phase and a hydrophobic phase.

Further regarding claim 18, Therriault ('247) teaches in column 3, lines 53-57, a conductive adhesive layer comprising a hydrophilic phase and a hydrophobic phase for the purpose of improving the adhesiveness of the electrode.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the conductive adhesive layer of Therriault in place of the conductive adhesive layer of Duan for the purpose of improving the adhesiveness of the electrode.

Regarding claim 19, Duan ('988) teaches the conductor (26) is in the form of a layer of conductive material disposed upon at least a portion of the first, opposed surface of the electrode support (16).

Regarding claim 20, Duan ('988) teaches the electrode further comprises a release liner (12) disposed upon an exposed surface of the conductive adhesive layer.

Regarding claim 21, Duan ('988) teaches the portion of the conductive adhesive layer that has been hot-pressed is a perimetrical portion.

Regarding claim 23, Duan ('988) teaches the conductor is in the form of a layer of conductive material and the area of the conductor is essentially coextensive with the area of the electrode support.

Regarding claim 24, Duan ('988) teaches the conductor comprises a conductive ink (read "silver ink" in example 15).

Regarding claims 25 and 26, Duan ('988) teaches the hydrophilic phase comprising (or consist essentially of) hydrophilic polymer material, an electrolyte, and a humectant (glycol, see column 7, lines 3-17), while Therriault ('247) teaches a hydrophobic phase comprising hydrophobic polymer derived from the polymerization of hydrophobic monomer or oligomer in the presence of a surfactant and the hydrophilic phase.

The reason for combining is the same as for claim 18 above.

Regarding claim 27, Therriault ('247) teaches in column 4, lines 53-59, the hydrophilic polymer material is selected from the group consisting of polymers containing one or more polyethylene glycol groups or polymers containing one or more pyrrolidone groups.

The reason for combining is the same as for claim 18 above.

Regarding claim 28, Duan ('988) teaches the electrolyte is selected from the group consisting of aqueous solutions of, potassium chloride, sodium chloride or lithium chloride.

Regarding claim 29, Duan ('988) teaches he humectant is selected from the group consisting of propylene glycol or sodium DL- pmolidonecarboxylate. (see column 7, lines 3-17).

Regarding claim 27, Therriault ('247) teaches in column 4, lines 60-66 the hydrophobic polymer comprises interpolymerized units derived from one or mort of the following monomers: acrylic acid, isooctyl acrylate, z-ethylhexyl acrylate and n- butyl acrylate.

The reason for combining is the same as for claim 18 above.

Regarding claims 31 and 32, Duan ('988) teaches the adherend is mammalian skin.

Regarding claim 33, Duan ('988), similar to claim 18 above, teaches a method of improving the adhesion strength of a conductive adhesive layer by hot-pressing a portion of the conductive adhesive layer.

Duan ('988) does not teach the adhesive layer comprising a hydrophilic phase and a hydrophobic phase.

Further regarding claim 33, Therriault ('247) teaches in column 3, lines 53-57, a conductive adhesive layer comprising a hydrophilic phase and a hydrophobic phase for the purpose of improving the adhesiveness.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the conductive adhesive layer of Therriault in place of the conductive adhesive layer of Duan for the purpose of improving the adhesiveness.

Regarding claim 34, Duan ('988) teaches the portion of the conductive adhesive layer that has been hot-pressed is a perimetrical portion.

Allowable Subject Matter

3. Claims 22 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. .

The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 22, the prior art of record neither shows nor suggest an indentation that separates the heat-pressed portion of the conductive adhesive layer from the remaining portion of the conductive adhesive layer, along with the other limitations of the claim.

Regarding claim 35, the prior art of record neither shows nor suggest forming pinholes in the portion of the conductive adhesive layer to be hot-pressed prior to hot pressing, along with the other limitations of the claim.

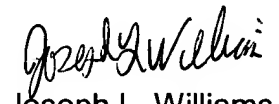
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph L. Williams
Primary Examiner
Art Unit 2879